

AMENDMENTS TO THE SPECIFICATION

Please delete the paper copy of the Sequence Listing previously submitted in the present application and replace with the Sequence Listing submitted herewith in electronic format.

In the specification at page 1, after the section entitled "RELATED APPLICATIONS" added in the Preliminary Amendment dated August 26, 2005, please insert the following new paragraph:

The Sequence Listing associated with this application is filed in electronic format *via* EFS-Web and hereby incorporated by reference into the specification in its entirety. The name of the text file containing the Sequence Listing is Sequence_Listing_12810_00119. The size of the text file is 272 KB, and the text file was created on February 29, 2008.

Please replace the abstract with the amended abstract attached hereto as a separate sheet pursuant to 37 CFR § 1.72.

In the specification at page 1, line 2, please replace the heading "Description" with the following heading:

BACKGROUND OF THE INVENTION

In the specification at page 5, after line 40, please insert the following heading:

BRIEF SUMMARY OF THE INVENTION

In the specification at page 6, before line 20, please insert the following paragraphs:

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 shows the amino acid sequence comparison of *C. elegans* LPLATs (Ce-T06E8.1, SEQ ID NO: 36, and Ce-F59F4.4, SEQ ID NO: 59) with *M. musculus* LPAAT (Mm-NP061350, SEQ ID NO: 58).

Figure 2 shows the fatty acid profiles of transgenic C13ABYS86 *S. cerevisiae* cells.

Figure 3 shows the fatty acid profiles of transgenic C13ABYS86 *S. cerevisiae* cells.

Figure 4 shows the elongation of exogenously applied 18:2^{Δ9,12} and 18:3^{Δ9,12,15}, following their endogenous Δ6-desaturation (data of Figures 2 and 3).

Figure 5 shows the fatty acid profiles of transgenic INVSc1 *S. cerevisiae* cells.

Figure 6 shows the fatty acid profiles of transgenic INVSc1 *S. cerevisiae* cells.

Figure 7 shows the acyl-CoA composition of transgenic INVSc1 yeasts transformed with the vectors pESCLeu PpD6Pse1/pYes2 (A) or pESCLeu-PpD6-Pse1/pYes2-T06E8.1 (B).

Figure 8 shows the vector map of pSUN3CeLPLAT.

Figure 9A shows the vector map of pGPTVLeB4-700 + T06E8.1.

Figure 9B shows the vector map of pGPTVUSP/OCS-1,2,3 PSE1(Pp)+D6-Des(Pt)+2AT (T06E8-1).

Figure 10A shows the biosynthetic pathway of LCPUFAs.

Figure 10B shows the biosynthetic pathway of LCPUFAs.

DETAILED DESCRIPTION OF THE INVENTION